

**From:** Ex. 4 - CBI  
**Sent:** 2/24/2012 9:43:24 AM  
**To:** "Kelley Chase" <Chase.Kelley@epamail.epa.gov>; "John Gilbert" <Gilbert.John@epamail.epa.gov>  
**CC:** "Gary Newhart" <Newhart.Gary@epamail.epa.gov>; Ex. 4 - CBI  
**Subject:** FW: EXTERNAL: Re: Fw: Verification/Completeness Check for Files 12027b\_rsk 175.pdf, 12027B\_tph\_purgeable.pdf and 1202b\_extractable.pdf (Posted Feb 13)

**From:** Richard Bauer [mailto:Bauer.Richard@epamail.epa.gov]  
**Sent:** Thursday, February 23, 2012 5:49 PM  
**To:** Cynthia Caporale; Ex. 4 - CBI  
**Cc:** Robin Costas; Stevie Wilding  
**Subject:** EXTERNAL: Re: Fw: Verification/Completeness Check for Files 12027b\_rsk 175.pdf, 12027B\_tph\_purgeable.pdf and 1202b\_extractable.pdf (Posted Feb 13)

Here is response to items in verification check report below (SERAS-001-DSR-021712\_Dimock\_5).

**File 12027b\_rsk175.pdf**

1) The EPA Region 9 Laboratory was informed at the onset of this project that samples for matrix QC would be designated by the field samplers and that extra sample volume for matrix QC would be provided. For the first set of samples received no samples were designated for matrix QC and no extra volume was provided. The second vial provided for each sample was kept and used as back up for sample analysis (for dilutions, re-analysis, confirmation, etc.) rather than being used for matrix QC.

Overall the laboratory received 166 samples for RSK175 for this project (98 "HW" samples plus 68 trip, field and equipment blanks). Although none of the samples in SDG 12027B were designated for lab matrix QC, subsequently eight MS/MSD sets were designated by the field samplers and performed by the lab.

2) Sample results for this SDG were qualified based on method blank results. All detected sample values less than 5X the associated method blank were qualified as estimated "J" and received a comment flag "B1" (note legend for comments and qualifiers on p. 5 of the report).

Sample results were **NOT** qualified based on field or trip blanks for this SDG. The EPA Region 9 Laboratory does not follow the National Functional Guideline for its internal review procedures and does not routinely qualify results based on field QC samples. Qualification based on field QC is typically performed during external review and validation of the data. Subsequent to issuance of this report EPA Region 3 requested that we start qualifying results based on trip blanks and field blanks as well as laboratory QC. This was started with SDG 12033A, but was not retroactively applied. In general we observed low level hits of methane in many of the method, field and trip blanks for the duration of this project. Some well samples had extremely high levels of methane and I think that low level cross contamination may have been prevalent. Applying the NFG rules for external review to raise the quantitation limit for methane may be advisable.

3) Results are flagged based on all QC results, including instrument QC (RSD, %D, etc.). This does not mean that all QC results were within the acceptance criteria listed in the SOP. For example, a CCV or quantitation limit standard that fails high is an indication of possible high bias in associated samples. Non-detect results in samples are not flagged for possible high bias. Our QA plan (attached) provides guidance on flagging in Appendix M.

**File 12027b\_tph\_purgeable.pdf**

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for sample analysis (for dilutions, re-analysis, confirmation, etc.) rather than being used for matrix QC.

**File 12027b\_tph\_extractable.pdf**

1) The EPA Region 9 Laboratory was informed at the onset of this project that samples for matrix QC would be designated by the field samplers and that extra sample volume for matrix QC would be provided. For the first set of samples received no samples were designated for matrix QC and no extra volume was provided. The second bottle provided for each sample was kept and used as back up for sample analysis (for dilutions, re-analysis, confirmation, etc.) rather than being used for matrix QC.

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Richard Bauer  
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From: Cynthia Caporale/ESC/R3/USEPA/US  
To: Richard Bauer/R9/USEPA/US@EPA  
Cc: Robin Costas/ESC/R3/USEPA/US@EPA, Stevie Wilding/ESC/R3/USEPA/US  
Date: 02/17/2012 11:08 AM  
Subject: Fw: Verification/Completeness Check for Files 12027b\_rsk 175.pdf,  
12027B\_tph\_purgeable.pdf and 1202b\_extractable.pdf (Posted Feb 13)

Another one.

Cynthia Caporale, Chief  
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----- Forwarded by Cynthia Caporale/ESC/R3/USEPA/US on 02/17/2012 02:08 PM -----

From: [Ex. 4 - CBI]  
To: Kelley Chase/R3/USEPA/US@EPA, Cynthia Caporale/ESC/R3/USEPA/US@EPA  
Cc: John Gilbert/CI/USEPA/US@EPA, Gary Newhart/CI/USEPA/US@EPA, [Ex. 4 - CBI]  
[Ex. 4 - CBI] [Ex. 4 - CBI]  
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.....is attached for dissolved gases, GRO and DRO/ORO

[Ex. 4 - CBI]

Lockheed Martin  
Scientific, Engineering, Response and Analytical Services (SERAS)

**Ex. 4 - CBI**

732-494-4021 (Fax)

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